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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/895,848	06/29/2001	Paul F. Crowder	· 122.4-US-U1	. 5900
22462	7590 07/16/2003			
GATES & COOPER LLP HOWARD HUGHES CENTER 6701 CENTER DRIVE WEST, SUITE 1050			EXAMINER	
			ZAHN, JEFFREY N	
LOS ANGEL	ES, CA 90045	•	ART UNIT	PAPER NUMBER
			2828	
			DATE MAIL ED. 07/17/2002	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Applicati n N .	Applicant(s)			
Office Action Summary		09/895,848	CROWDER, PAUL F.			
		Examiner	Art Unit			
		Jeffrey N Zahn	2828			
The MAILING DATE of this c mmunicati n appears n th cov r sheet with the c rrespondence address Peri df r Reply						
THE N - Exter after - If the - If NO - Failui - Any r	ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION.  SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, eply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply within the statutory minimum of thirty (3 will apply and will expire SIX (6) MONTHS, cause the application to become ABAN	or be timely filed  O) days will be considered timely.  S from the mailing date of this communication.  DONED (35 U.S.C. § 133).			
1)⊠	Responsive to communication(s) filed on 28 A	April 2003 .				
2a)⊠	·	is action is non-final.				
3)						
Dispositi	on of Claims	Ex parte Quayle, 1000 O.D.	11, 400 0.0. 210.			
4)⊠	Claim(s) 1-16 is/are pending in the application	ı <b>.</b>				
4a) Of the above claim(s) is/are withdrawn from consideration.						
5)	Claim(s) is/are allowed.		0 . 0			
6)🖾	Claim(s) <u>1-16</u> is/are rejected.		Parlop			
7)	Claim(s) is/are objected to.		PAUL IP			
8) Claim(s) are subject to restriction and/or election requirement. SUPERVISORY PATENT EXAMINE TECHNOLOGY CENTER 2800						
9)[	The specification is objected to by the Examine	r.				
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.						
12) The oath or declaration is objected to by the Examiner.						
Pri rity under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
	1. Certified copies of the priority documents have been received.					
	2. Certified copies of the priority documents have been received in Application No					
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
a) ☐ The translation of the foreign language provisional application has been received.  15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.						
Attachmen		, , , 23 0.0.0. 33	,			
2) Notic	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449) Paper No(s) _	5) Notice of Info	nmary (PTO-413) Paper No(s) rmal Patent Application (PTO-152)			
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#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding Claims 1 and 4-6, and all claims that depend therefrom, the Applicant has claimed an "open loop controller..." in the preamble of the claim. The body of the other than a lookup table with different settings claim fails to specify any structure to support the product claimed; therefore the claim is indefinite because it is unclear/vague as to what is being claimed.

Эр 7/14/03

Regarding Claims 2 and 3, and all claims that depend therefrom, it is unclear/vague as to where and how the temperature regulator is incorporated into the open loop controller and SGDBR.

## Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4-6 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Coldren (US 4896325).

Coldren discloses an open loop controller (Fig. 1; (48)(44)(46)(50)) for a SGDBR laser (Fig. 1) comprising:

a first mirror current setting (48);

a second mirror current setting (48);

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a phase current setting (46;48); and

a gain current setting (44),

the first mirror current setting, second current setting, phase current setting and gain current setting controlling an output wavelength of the SGDBR. (abstract; see also col. 7, line 64- col. 8, line 43)

It is implied/inherent within Coldren that "something" will control the settings of the controls to facilitate wavelength, gain, etc. control. (i.e. a human operator, etc.) It is also implied that the operator will have documentation (lookup tables, etc.) to support operation of the device. The documentation will have information, i.e. tables, that list the values of mirror currents, gain current and phase current that operate the SGDBR device in a predictable manner, i.e. specific wavelength, etc.

### Claim Rejections - 35 USC § 103

Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coldren as applied to Claim 1 above.

Coldren as applied to Claim 1 above lacks a temperature regulator as claimed. However, it is well known in the art that wavelength is a function of temperature relative to a SGDBR device. In addition it is well know in the art that a temperature regulator is used to stabilize the temperature of the SGDBR device. Therefore, it would have been obvious to one of ordinary skill in the art of laser at the time of the invention to combine Coldren with a temperature regulator to stabilize the temperature of the SGDBR and therefore stabilize the wavelength outputted.

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### Response to Arguments

Applicant's arguments filed 28 April 2003 have been fully considered but they are not persuasive. The Applicant argues that Coldren does not disclose/teach all the elements claimed; specifically, the limitations that have been indicated as implied/inherent of Coldren and discussed above. This argument is not persuasive because inherent features/limitations of the prior art do not have to be expressly disclosed/taught if they are inherent. Here, the device of Coldren simply will not work unless it is operated in a manner that controls the current settings, etc. discussed. In addition, the settings must have some predicable effect on the device as discussed.

#### Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey N Zahn whose telephone number is 703-305-3443. The examiner can normally be reached on M-F: 8:30-5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Ip can be reached on 703-308-3098. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-

0956.

Jeffrey Zahn July 13, 2003 PAUL IP

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